



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,176	04/23/2001	Scott William Bennett	06551.0069	4868
33221	7590	05/18/2010		
HOLLAND & KNIGHT LLP				
2099 PENNSYLVANIA AVE, N.W.				
WASHINGTON, DC 20006				
EXAMINER				
MILLS, FRANK D				
ART UNIT		PAPER NUMBER		
2176				
MAIL DATE		DELIVERY MODE		
05/18/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

09/839,176

**Applicant(s)**

BENNETT ET AL.

**Examiner**

FRANK D. MILLS

**Art Unit**

2176

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16, 35-48, 54-57 and 63-65 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16, 35-48, 54-57 and 63-65 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-85/86)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Applicant attempted to file a Petition for Revival and RCE on 4/27/2006. However, only the fee for the Petition for Revival was received, and not the actual petition. The actual petition was filed on 4/27/2007 and granted on 2/22/2008. As per the petition decision filed 2/22/2008, this action is based in response to the amendment filed 2/15/2006.

- Applicant has filed three affidavits under 37 CFR 1.131—filing date 2/15/2006
- Applicant has filed a Request for Correction of Inventorship under 37 CFR 1.148(a)—filing date 5/31/2005

Applicant has amended and argued against all objections and rejections previously set forth in the Office Action dated 08/15/2005. In response to applicant's amendments and arguments:

- Examiner finds the three affidavits filed under 37 CFR 1.131 ineffective.
- Examiner objects to the specification.
- Examiner rejects claims 63-65 under 35 USC 101.
- Examiner maintains previous rejections under 35 USC 103(a) of claims 1-16, 35-48, 54-57, and 63-65.

### ***Inventorship***

In view of the papers filed 5/31/2005, it has been found that this nonprovisional application, as filed, through error and without deceptive intent, improperly set forth the

inventorship, and accordingly, this application has been corrected in compliance with 37 CFR 1.48(a). The inventorship of this application has been changed by adding Mila Ramos-Santacruz as a co-inventor along with the previously listed inventors, Chinatsu Aone and Scott William Bennett.

The application will be forwarded to the Office of Initial Patent Examination (OIPE) for issuance of a corrected filing receipt, and correction of Office records to reflect the inventorship as corrected.

### ***Response to Amendment***

*Examiner Note: The reference at issue is Aone, et al., REES: A Large-Scale Relation and Event Extraction System, 04 May 2000, Proceedings of the 6th Applied Language Natural Processing Conference (ANLP-2000), Seattle, WA, Pages 1-9, herein after the "Aone" reference. The Aone reference is referred to in the present specification at paragraph [0031] and paragraph [0064].*

The affidavits filed on 2/15/2006 under 37 CFR 1.131 have been considered but are ineffective to overcome the Aone reference. The evidence submitted is insufficient to establish a conception of the invention prior to the effective date of the Aone reference. While conception is the mental part of the inventive act, it must be capable of proof, such as by demonstrative evidence or by a complete disclosure to another. Conception is more than a vague idea of how to solve a problem. The requisite means

themselves and their interaction must also be comprehended. See *Mergenthaler v. Scudder*, 1897 C.D. 724, 81 O.G. 1417 (D.C. Cir. 1897).

First, the affidavits state "I was in possession of the information disclosed in the Aone publication prior to the *filing date of the subject application*" (emphasis added). A 37 CFR 1.131 affidavit is used to establish invention of the subject matter prior to the *effective date of the cited reference* (see 37 CFR 1.131(a)). A printed publication is effective as of its publication date. Accordingly, the affidavits fail to establish invention prior to the Aone publication date (May 4, 2000).

Second, a mere statement of possession is insufficient to establish a conception of the invention. 37 CFR 1.131(b) states: "The showing of facts shall be such, in character and weight, as to establish... conception of the invention prior to the effective date of the reference coupled with due diligence from prior to said date to a subsequent reduction to practice or to the filing of the application. *Original exhibits of drawings or records, or photocopies thereof, must accompany and form part of the affidavit or declaration or their absence must be satisfactory explained*" (emphasis added). Accordingly, the evidence is insufficient to establish a conception of the claimed subject matter prior to the Aone publication date (May 4, 2000).

In the rejections of claims under 35 USC 103(a), the Aone reference qualifies as a reference under 35 USC 102(a) because it is "by others." MPEP states, "A *prima facie* case is made out under 35 USC 102(a) if, within 1 year of the filing date, the invention, or an obvious variant thereof, is described in a 'printed publication' whose

authorship differs **in any way** from the inventive entity" (see MPEP 2132.01). In this case, the authorship of the reference is Chinatsu Aone and Mila Ramos-Santacruz and the inventorship of the application is Aone, Ramos-Santacruz, and Scott William Bennett. Accordingly, the Aone reference is a proper reference under 35 USC 102(a).

Instead of filing affidavits under 37 CFR 1.131 to antedate the reference, the examiner suggests, if appropriate in light of the facts, that the applicant consider filing affidavits under 37 CFR 1.132 to attribute the reference to all of the inventors (see MPEP 716.10). MPEP 716.10 states: "it is incumbent upon the inventors named in the application... to rebut a rejection under 35 USC 102(a)... to provide a satisfactory showing by way of affidavit 37 CFR 1.132 that the inventorship of the application is correct in that the reference discloses subject matter derived from the applicant rather than invented by the author... notwithstanding the authorship of the article."

### ***Specification***

The use of the trademarks GROUPWISE, LOTUS NOTES, and OUTLOOK have been noted in this application (see Paragraph [0004] and Paragraph [0043]). They should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 63-65 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

*Claims 63-65:*

Claims 63-65 recite a "computer program product comprising program code." A physical storage medium is not a claimed element of the "computer program product." Thus, the subject matter of claims 63-65 are directed to a computer program. A computer program is not a process, machine, manufacture, or a composition of matter as defined in 35 U.S.C. 101. Accordingly, the recited computer program is non-statutory subject matter.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 2, 4-8, 10-16, 35, 36, 38-41, 43-48, 54-57, 63, and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belfiore, et al., (US PG-Pub 2002/0059425 A1), in view Aone, et al., REES: A Large-Scale Relation and Event Extraction System, 04 May 2000, Proceedings of the Sixth Natural Language Processing Conference (ANLP-2000), Seattle, WA, Pages 1-9.**

*Claims 1, 63, and 65:*

Belfiore teaches:

- *receiving at the server content addressed to a particular device* (address of web page requested by user to destination that is processed through the server)(paragraph 7),
- *generating a form containing data extracted from the content* (creating ad hoc templates. Template generation)(paragraph 113), and
- *making available to the particular device a notification of the event* (event notification service that passes messages to device)(paragraph 18).



Belfiore does not teach, but Aone teaches:

- *typing at least one event reflected by the content* (event extraction system, figure 2 shows ATTACK target event template for a sentence)(section 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Belfiore to include an event extraction system that generates a template for events as taught by Aone, providing the benefit of Natural Language Processing for large-scale relation and event extraction system (Aone, Title, Abstract) and data structure that follow a schema in which the meaning of the communication for intelligent decisions and inferences made on the based on the meaning of the data (Belfiore, Abstract section).

*Claim 2:*

Belfiore does not expressly teach, but Aone teaches:

- *extracting data from the content, the extracted data including a set of data elements* (figure 2 shows example of event template for a sentence),
- *filling fields of a set of templates with the data elements by matching fields to the data elements according to a determined type for each data element* (figure 2 shows matching the sentences with the data types WEAPON - missies), and
- *identifying the event based on the filled fields of the templates* (figure 2 shows event in sentence is identified as Type: conflict).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Belfiore to include events as templates for natural sentences where a type is matched to the sentence and identifies the type of the event as taught by Aone, providing the benefit of Natural Language Processing for large-scale relation and event extraction system (Aone, Title, Abstract) and data structure that follow a schema in which the meaning of the communication for intelligent decisions and inferences made on the based on the meaning of the data (Belfiore, Abstract section).

#### Claim 4

- Belfiore teaches:  
*receiving at the central controller content including unstructured text addressed to a particular device (address of web page requested by user to destination that is processed through the server)(paragraph 7),*
- *generating a form containing data extracted from the unstructured text (creating ad hoc templates ... Template generation)(paragraph 113), and*
- *making available to the particular device a notification of the event (event notification service that passes messages to device)(paragraph 18).*

Belfiore does not expressly teach, but Aone teaches:

- *typing at least one event reflected by the unstructured text (figure 2 shows event in sentence is identified as Type: conflict).*

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Belfiore to include events as templates for natural sentences where a type is matched to the sentence and identifies the type of the event as taught by Aone, providing the benefit of Natural Language Processing for large-scale relation and event extraction system (Aone, Title, Abstract) and data structure that follow a schema in which the meaning of the communication for intelligent decisions and inferences made on the based on the meaning of the data (Belfiore, Abstract section).

*Claim 5:*

Belfiore does not expressly teach, but Aone teaches:

- *identifying the event in the unstructured text* (figure 2 shows event in sentence is identified as Type: conflict), and
- *identifying an event type for the event based on stored information reflecting event types* (REES extracts and identifies the 61 types of events from event ontology)(sec 1.2; figure 1, table 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Belfiore to include events that are identified in sentences as a type where the system extracts and identifies the types of events from the event ontology as taught by Aone, providing the benefit of Natural Language Processing for large-scale relation and event extraction system (Aone, Title, Abstract) and data structure that follow a schema in which the meaning of the communication for intelligent decisions and

inferences made on the based on the meaning of the data (Belfiore, Abstract section).

*Claim 6:*

Belfiore does not expressly teach, but Aone teaches:

- *selecting a form type from a set of forms based on the type of event* (the Person-Affiliation relation template is chosen based on encryption)(section 1, figure 1),  
and
- *populating fields of a blank form of the selected form type with the data from the unstructured text* (template fields are populated for the event)(figures 1, 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Belfiore to include relationships based on types identified and populating template fields for an event as taught by Aone, providing the benefit of Natural Language Processing for large-scale relation and event extraction system (Aone, Title, Abstract) and data structure that follow a schema in which the meaning of the communication for intelligent decisions and inferences made on the based on the meaning of the data (Belfiore, Abstract section).

*Claim 7:*

Belfiore does not teach, but Aone teaches:

- *populating fields of a form selected from a set of forms based on the type of event with the data from the unstructured text* (table 3 shows the system recall.

Once those event types are stored in the event ontology, they can be recalled upon future extractions)(section 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Belfiore to include storing events in the event ontology for later recall and reuse as taught by Aone, providing the benefit of Natural Language Processing for large-scale relation and event extraction system (Aone, Title, Abstract) and data structure that follow a schema in which the meaning of the communication for intelligent decisions and inferences made on the based on the meaning of the data (Belfiore, Abstract section).

*Claim 8 and 41:*

Belfiore teaches:

- *transmitting the notification of the event to the particular device* (content of message transmitted from host to a client device 110, figure 1 of events 155 over 190).

*Claims 10 and 43:*

Belfiore does not teach, but Aone teaches:

- *sending at least one of (i) the form, (ix) a summary of the unstructured text, and (x) the form and a summary of the unstructured text* (template goes back and forth between REES and the user GUI, through the template tool)(figure 3, sec 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Belfiore to include a template processing system between a server and user GUI with processing from the template tool as taught by Aone, providing the benefit of Natural Language Processing for large-scale relation and event extraction system (Aone, Title, Abstract) and data structure that follow a schema in which the meaning of the communication for intelligent decisions and inferences made on the based on the meaning of the data (Belfiore, Abstract section).

*Claims 11 and 44:*

Belfiore teaches:

- *identifying an application from the set of applications executable by the particular device based on the type of event* (based on a set of observed events or stored events transferred into action)(paragraph 121-122), and
- *invoking an interface associated with the identified application* (user interface supports use of personal device)(paragraph 115).

*Claim 12:*

Belfiore teaches:

- *integrating information associated with the event notification with data managed by the identified application* (the computer device to understand component...

perform intelligent action locally stored schema... event notification service...)(paragraph 18).

*Claims 13 and 45:*

Belfiore teaches:

- *at least one of a calendar application for managing event data associated with a calendar, a task manager for managing event data associated with tasks, an address book for managing event data associated with contact information for entities, and a portfolio manager for managing event data associated with a portfolio (e.g., calendar)(paragraph 73).*

*Claims 14 and 46:*

Belfiore teaches:

- *forming an icon reflecting the event (e.g., send icon)(paragraph 6), and*
- *sending data to the particular device to generate the icon (send icon on a computer display routed over the internet)(paragraph 6).*

*Claims 15 and 47:*

Belfiore teaches:

- *forming an audio message reflecting the event (input/output component ... user interface converts text to audio)(paragraph 94), and*

- *sending data to the particular device to generate the audio message* (audio message)(paragraph 95).

*Claims 16 and 48:*

Belfiore teaches:

- *forming a visual message reflecting the event* (typed e-mail message displayed visually on text based email displayed through video), and
- *sending data to the particular device to generate the visual message* (where message displayed through video on client PC, which is sent from the server across the communications link)(paragraph 94).

*Claim 35:*

Belfiore teaches:

- *receiving at the central controller content addressed to a particular device* (address of web page requested by user to destination that is processed through the server)(paragraph 7),
- *generating a form containing data extracted from the content* (creating ad hoc templates ... Template generation)(paragraph 113), and
- *making available to the particular device a notification of the event* (event notification service that passes messages to device)(paragraph 18).

Belfiore does not teach, but Aone teaches:



- *typing at least one event reflected by the content* (event extraction system, figure 2 shows ATTACK target event template for a sentence)(section 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Belfiore to include an event extraction system that generates a template for events as taught by Aone, providing the benefit of Natural Language Processing for large-scale relation and event extraction system (Aone, Title, Abstract) and data structure that follow a schema in which the meaning of the communication for intelligent decisions and inferences made on the based on the meaning of the data (Belfiore, Abstract section).

*Claim 36:*

Belfiore teaches:

- *a processor* (server 120)(paragraph 47), and
- *a memory storing instructions executable by the processor to receive content addressed to a particular device* (address of web page requested by user to destination that is processed through the server)(paragraph 7),
- *perform to generate a message in a data representation language containing data reflecting an event extracted from the content* (creating ad hoc templates... Template generation of-the data extracted from the base text)(paragraph 113), and

- *make the message available to the particular device* (event notification service that passes messages to device)(paragraph 18).

Belfiore does not teach, but Aone teaches:

- *extraction process* (event extraction system, figure 2 shows ATTACK target event template for a sentence)(section 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Belfiore to include an event extraction system that generates a template for events as taught by Aone, providing the benefit of Natural Language Processing for large-scale relation and event extraction system (Aone, Title, Abstract) and data structure that follow a schema in which the meaning of the communication for intelligent decisions and inferences made on the based on the meaning of the data (Belfiore, Abstract section).

*Claim 38:*

Belfiore teaches:

- *a processor* (e.g., server 120)(paragraph 47),
- *a memory* (e.g., storage... memory)(paragraph 22),
- *containing instructions executable by the processor to receive content including unstructured text addressed to a particular device* (address of web page

requested by user to destination that is processed through the server)(paragraph 7),

- *generate a form containing data extracted from the unstructured text* (creating ad hoc templates... Template generation)(paragraph 113), and
- *make available to the particular device a notification of the event* (event notification service that passes messages to device)(paragraph 18).

Belfiore does not teach, but Aone teaches:

- *type at least one event reflected by the unstructured text* (figure 2 shows event in sentence is identified as Type: conflict).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Belfiore to include events as templates for natural sentences where a type is matched to the sentence and identifies the type of the event as taught by Aone, providing the benefit of Natural Language Processing for large-scale relation and event extraction system (Aone, Title, Abstract) and data structure that follow a schema in which the meaning of the communication for intelligent decisions and inferences made on the based on the meaning of the data (Belfiore, Abstract section).

*Claim 39:*

Belfiore does not teach, but Aone teaches:

- *identifies the event in the unstructured text* (identifying the words in the sentence provided to the system)(figure 2), and
- *identifies an event type for the event based on stored information reflecting event types* (figure 2 shows event in sentence is identified as Type: conflict).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Belfiore to include events as templates for natural sentences where a type is matched to the sentence and identifies the type of the event as taught by Ache, providing the benefit of Natural Language Processing for large-scale relation and event extraction system (Ache, Title, Abstract) and data structure that follow a schema in which the meaning of the communication for intelligent decisions and inferences made on the based on the meaning of the data (Belfiore, Abstract section).

*Claim 40:*

Belfiore does not expressly teach, but Aone teaches:

- *populates fields of a form selected from a set of forms based on the type of event with the data from the unstructured text* (figure 2 shows matching the sentences with the data types WEAPON - missies).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Belfiore to include events as templates for natural sentences where a type is matched to the sentence and identifies the type of the event as taught by

Aone, providing the benefit of Natural Language Processing for large-scale relation and event extraction system (Aone, Title, Abstract) and data structure that follow a schema in which the meaning of the communication for intelligent decisions and inferences made on the based on the meaning of the data (Belfiore, Abstract section).

*Claim 54:*

Belfiore teaches:

- *a processor (e.g., server 120)(paragraph 47),*
- *a memory (e.g., storage, ... memory)(paragraph 22),*
- *for storing instructions executable by the processor to storing for a client including unstructured text (address of web page requested by user to destination that is processed through the server)(paragraph 7),*
- *generate a form in a data representation language including data extracted from the content (creating ad hoc templates ... Template generation)(paragraph 113), and*
- *transmitting to the client a notification including the form (event notification service that passes messages to device)(paragraph 18).*

*Claim 55:*

Belfiore does not expressly teach, but Aone teaches:

- *populating fields of at least one stored template (figure 2 shows matching the sentences with the data types WEAPON - missies).*

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Belfiore to include events as templates for natural sentences where a type is matched to the sentence and identifies the type of the event as taught by Aone, providing the benefit of Natural Language Processing for large-scale relation and event extraction system (Aone, Title, Abstract) and data structure that follow a schema in which the meaning of the communication for intelligent decisions and inferences made on the based on the meaning of the data (Belfiore, Abstract section).

*Claim 56:*

Belfiore teaches:

- *sending an instruction to prompt a user to cause the client to perform an operation on data in at least one field of the template (data in stored schema, upon user properly authenticates, user can update information in the scheme)(paragraph 19).*

*Claim 57:*

Belfiore teaches:

- *sending an instruction to invoke a process associated with an application executed on the device to perform an operation on data in at least one field of the template (server sends event notification for schema update service, also, server*

sends instructions to client to display results or event information)(paragraph 18,19).

**Claims 3, 9, 37, 42, and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belfiore, et al., (US PG-Pub 2002/0059425 A1), in view Aone, et al., REES: A Large-Scale Relation and Event Extraction System, 04 May 2000, Proceedings of the Sixth Natural Language Processing Conference (ANLP-2000), Seattle, WA, Pages 1-9, in further view of Liddy et al., (US Patent 6,026,388).**

*Claims 3, 37, and 64:*

Belfiore teaches:

- *(d) fills fields of templates with corresponding information from (fill in fields of template)(paragraph 50).*

Belfiore does not teach but Aone teaches:

- *the content based on a result of the application of the pattern sets to the logical hierarchical tree, reflecting the linking of any anaphoric expression to its referent, in the content (event merging - merging co-referring event into a single event)(section 2.3.2),*
- *(b) applying to the logical hierarchical tree extraction pattern sets to recognize and tag proper names and pre-specified events in the content (tagging modules relying on pattern based extraction ... recognizes names)(section 2.2.1), and*

- (c) *linking any anaphoric expression to its referent, in the content* (reference rules applied to selected auophara whose antecedents ...)(section 2.2).

Belfiore in view of Aone does not expressly teach, but Liddy teaches:

- *tokenizing* (column 18, line 5) *the content into a logical hierarchical tree representing parts of the content* (tree representation of query)(column 19, line 30).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Belfiore to include event merging, tagging modules relying on pattern based extraction, recognizing names as taught by Aone, providing the benefit of Natural Language Processing for large-scale relation and event extraction system (Aone, Title, Abstract) and data structure that follow a schema in which the meaning of the communication for intelligent decisions and inferences made on the based on the meaning of the data (Belfiore, Abstract section), further to modify Belfiore in view of Aone to include tree representation of queries as taught by Liddy, providing the benefit of a user interface and enhancement for natural language information retrieval (Liddy, Title, Abstract).

*Claims 9 and 42:*

Belfiore, in view of Aone, does not expressly teach, but Liddy teaches:



- *prompting a user for a request for at least one of (v) the unstructured text* (sign on screen prompts user to sign on. Upon validation the query screen allows user to request a natural language query, which is equivalent to claimed language of unstructured text)(column 28, line 41 through column 24, line 13).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Belfiore in view of Aone to include prompting a user and then allowing user to request a natural language query taught by Liddy, providing the benefit of a user interface and enhancement for natural language information retrieval (Liddy, Title, Abstract).

### ***Response to Arguments***

Applicant's arguments filed 2/15/2006 have been fully considered but they are not persuasive.

#### *Arguments regarding the Aone reference:*

Applicant argues that the Aone reference is not prior art with respect to the subject application, because "each of the named inventors was in possession of the information disclosed in the Aone publication prior to the filing date of the subject application" (see Remarks, Pages 1-2).

The examiner disagrees.

The argument and associated affidavits under 37 CFR 1.131 are addressed above in the "Response to Amendments" section.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See Form 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANK D. MILLS whose telephone number is 571-270-3172. The examiner can normally be reached on Monday thru Thursday, 9:30 am- 7 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DOUG HUTTON can be reached on 571-272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/FRANK D MILLS/  
Examiner, Art Unit 2176  
April 30, 2010

/DOUG HUTTON/  
Supervisory Patent Examiner, Art Unit 2176